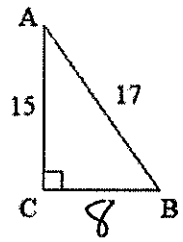
Six Trigonometric Ratios - Practice

Find the following:

$\sin(A) = \frac{8}{17}$ $\sin(B) = \frac{15}{17}$

$\cos(A) = \frac{15}{17}$ $\cos(B) = \frac{8}{17}$

$\tan(A) = \frac{8}{15}$ $\tan(B) = \frac{15}{8}$

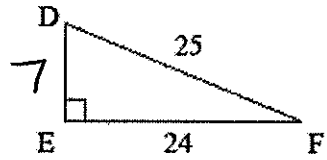


Find the following:

$\sin(D) = \frac{24}{25}$ $\sin(F) = \frac{7}{25}$

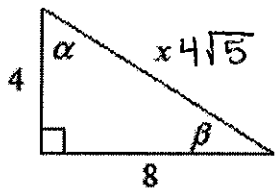
$\cos(D) = \frac{7}{25}$ $\cos(F) = \frac{24}{25}$

$\tan(D) = \frac{24}{7}$ $\tan(F) = \frac{7}{24}$



Find all six trigonometric functions of α

$X = \sqrt{80} = 4\sqrt{5}$



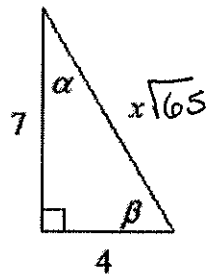
$\sin\alpha = \frac{2\sqrt{5}}{5}$ $\csc\alpha = \frac{\sqrt{5}}{2}$

$\cos\alpha = \frac{\sqrt{5}}{5}$ $\sec\alpha = \sqrt{5}$

$\tan\alpha = 2$ $\cot\alpha = \frac{1}{2}$

Find all six trigonometric functions of β:

$X = \sqrt{65}$



$\sin\beta = \frac{7\sqrt{65}}{65}$ $\csc\beta = \frac{\sqrt{65}}{7}$

$\cos\beta = \frac{4\sqrt{65}}{65}$ $\sec\beta = \frac{\sqrt{65}}{4}$

$\tan\beta = \frac{7}{4}$ $\cot\beta = \frac{4}{7}$

Fill in the blanks:

The reciprocal of the sine function is the _____ function. Cosecant

The reciprocal of the cosine function is the _____ function. Secant

The reciprocal of the tangent function is the _____ function. Cotangent

The reciprocal of the cosecant function is the _____ function. Sine

The reciprocal of the secant function is the _____ function. Cosine

The reciprocal of the cotangent function is the _____ function. tangent